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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,157	09/24/2003	Satoshi Hiratsuka	YAMA:058	2828

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P.O. Box 826
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EXAMINER

QIN, JIANCHUN

ART UNIT	PAPER NUMBER
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2837

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/01/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/670,157

Applicant(s)

HIRATSUKA, SATOSHI

Examiner

Jianchun Qin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 1/9/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3 and 7-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruki (U.S. Pat. No. 20020126874) in view of Obata (U.S. Pat. No. 5147970) and Eller et al. (U.S. Pat. No. 5889860).

With respect to claim 1:

Haruki teaches an electronic musical apparatus comprising: a music playing data extracting device which extracts a music playing data file from a given music work resource including encrypted or unencrypted MIDI or non-MIDI data (sections 0027, 0030, 0037 and 0048); an compressing device which compress said extracted music playing data file (sections 0027, 0030, 0037 and 0048); a storing device which stores said compressed music playing data file (sections 0027 and 0030); a decoding device which decodes said compressed music playing data file from said storing device (section 0034); and an automatic music playing device which plays music of said given music work resource based on said decoded music playing data file (section 0028).

Haruki does not mention expressly: said extracted music playing data file is for controlling a tone generator for generating musical tone signals for a musical

Art Unit: 2837

performance; an encrypting device which encrypt said extracted music playing data file using an encryption key; a decrypting device which decrypt said encrypted music playing data file from said storing device using a decryption key which corresponds to said encryption key; and said music playing data file is MIDI data.

Obata discloses an electronic musical instrument for generating musical tones on the basis of characteristics of input waveform signal (Abstract), and teaches: a music playing data extracting device (the MCP 3 shown in Fig. 2) which extracts a music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource (col. 16, lines 39-51 and col. 28, lines 8-21); wherein said music playing data file is MIDI data (col. 7, lines 7-14; col. 41, lines 8-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Haruki such that said music playing data extracting device can extract a music playing data file in MIDI format for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource, in order to provide an electronic musical instrument in which MIDI information related to tone generation in an input source can be automatically determined and manipulated for better playing music of the input data (Obata, col. Col. 5, lines 36-44).

Eller et al. teach an electronic musical system comprising: an encrypting device which encrypt extracted music playing data file using an encryption key (col. 5, lines 50-60; col. 8, lines 39-40); a storing device which stores said encrypted music playing data

Art Unit: 2837

file (col. 5, lines 50-60; col. 6, lines 4-6); a decrypting device which decrypt said encrypted music playing data file from said storing device using a decryption key which corresponds to said encryption key (col. 5, lines 53-60; col. 6, lines 40-60; col. 8, lines 40-44); and an automatic music playing device which plays music of said given music work resource based on said decrypted music playing data file (col. 6, lines 12-17, lines 40-60; col. 8, lines 29-34, lines 40-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

With respect to claim 2:

Haruki teaches a method for ensuring secure use of a music playing data file comprising the steps of: extracting a music playing data file from a given music work resource including encrypted or unencrypted MIDI or non-MIDI data (sections 0027, 0030, 0037 and 0048); compressing said extracted music playing data file (sections 0027, 0030, 0037 and 0048); storing said compressed music playing data file (sections 0027 and 0030); decoding said compressed music playing data file from said storing device (section 0034); and automatic playing music of said given music work resource based on said decoded music playing data file (section 0028).

Haruki does not mention expressly: said step of extracting extracts a music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource; encrypting said extracted music playing data file using an encryption key; decrypting said encrypted music playing data file from said storing device using a decryption key which corresponds to said encryption key; and wherein the music playing data file is MIDI data.

Obata discloses an electronic musical instrument for generating musical tones on the basis of characteristics of input waveform signal (Abstract), and teaches: a music playing data extracting device (the MCP 3 shown in Fig. 2) which extracts a music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource (col. 16, lines 39-51 and col. 28, lines 8-21); wherein said music playing data file is MIDI data (col. 7, lines 7-14; col. 41, lines 8-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Haruki such that said music playing data extracting device can extract a music playing data file in MIDI format for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource, in order to provide an electronic musical instrument in which MIDI information related to tone generation in an input source can be automatically determined and manipulated for better playing music of the input data (Obata, col. Col. 5, lines 36-44).

Eller et al. teach a method for ensuring secure use of a music playing data file comprising the steps of: encrypting said extracted music playing data file using an encryption key (col. 5, lines 50-60; col. 8, lines 39-40); storing said encrypted music playing data file (col. 5, lines 50-60; col. 6, lines 4-6); decrypting said encrypted music playing data file as stored in said step of storing using a decryption key which corresponds to said encryption key (col. 5, lines 53-60; col. 6, lines 40-60; col. 8, lines 40-44); and automatically playing music of said given music work resource based on said decrypted music playing data file (col. 6, lines 12-17, lines 40-60; col. 8, lines 29-34, lines 40-44).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

With respect to claim 3:

The teaching of Eller et al. further includes: said automatic music playing device renders said decrypted music playing data file unutilizable after said music playing device has played music of said given music work resource (col. 6, lines 47-60; col. 9, lines 17-36).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught

by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

With respect to claim 7:

Haruki further teaches: a computer program for ensuring secure use of a music playing data file (Abstract), said program comprising program instructions for a computer to execute: a step of extracting a music playing data file from a given music work resource including encrypted or unencrypted MIDI or non-MIDI data (sections 0027, 0030, 0037 and 0048); a step of compressing said extracted music playing data file (sections 0027, 0030, 0037 and 0048); a storing device which stores said compressed music playing data file (sections 0027 and 0030).

Haruki does not mention expressly: said step of extracting extracts a music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource; a step of encrypting said extracted music playing data file using an encryption key; and wherein the music playing data file is MIDI data.

Obata discloses an electronic musical instrument for generating musical tones on the basis of characteristics of input waveform signal (Abstract), and teaches: a music playing data extracting device (the MCP 3 shown in Fig. 2) which extracts a music playing data file for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource (col. 16, lines 39-51 and col. 28,

Art Unit: 2837

lines 8-21); wherein said music playing data file is MIDI data (col. 7, lines 7-14; col. 41, lines 8-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Haruki such that said music playing data extracting device can extract a music playing data file in MIDI format for controlling a tone generator for generating musical tone signals for a musical performance from a given music work resource, in order to provide an electronic musical instrument in which MIDI information related to tone generation in an input source can be automatically determined and manipulated for better playing music of the input data (Obata, col. Col. 5, lines 36-44).

Eller et al. teach a computer program for ensuring secure use of a music playing data file (Abstract), said program comprising program instructions for a computer to execute: a step of encrypting said extracted music playing data file using an encryption key (col. 5, lines 50-60; col. 8, lines 39-40); and a step of storing said encrypted music playing data file (col. 5, lines 50-60; col. 6, lines 4-6).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Eller et al. into the apparatus taught by Haruki in order to provide better mechanism for controlling access to protected information (such as digital audio files) from a server as well as discouraging and tracking subsequent redistribution of such information after it has been transmitted from the server (Eller et al., cols. 1-2, lines 66-3).

With respect to claims 8-11:

The teaching of Haruki further includes: said automatic music playing device includes a tone generator that generates musical tone signals based on the decrypted data file (section 0028); the step of automatically playing music of said given music work resource includes generating musical tone signals based on the decrypted data file (section 0028); automatically playing music of said given music work resource based on said decrypted music playing data file (section 0028); and the step of automatically playing music of said given music work resource includes generating musical tone signals based on the decrypted data file (section 0028).

Haruki does not mention expressly: said data file is MIDI data file.

The teaching of Obata includes: a tone generator that generates musical tone signals based on converted MIDI data file (col. 7, lines 7-14; col. 41, lines 8-14).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Haruki such that said tone generator receives MIDI input for generating musical tone signals for a musical performance, in order to provide an electronic musical instrument in which MIDI information related to tone generation in an input source can be automatically determined and manipulated for better playing music of the input data (Obata, col. Col. 5, lines 36-44).

3. Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haruki in view of Obata and Eller et al., as applied to claims 1 and 3 above, and further in view of Oishi et al. (U.S. Pat. No. 6792539).

Haruki in view of Obata and Eller et al. teach the method that includes the subject matter discussed above. The combination does not mention expressly:

Art Unit: 2837

regarding claims 4 and 5, said given music work resource is in an encrypted condition, and said music playing data extracting device decrypts said given music work resource in the encrypted condition before extracting said music playing data file; regarding claim 6, said music playing data extracting device renders said decrypted given music work resource unutilizable after said music playing data extracting device has extracted said music playing data file from said encrypted given music work resource.

With respect to claims 4 and 5:

Oishi et al. teach a processing method and apparatus for encrypted audio track data transfer, comprising: encrypting a given music work resource by a first encryption means, decrypting said given music work resource in the encrypted condition, extracting data information from the decrypted file, and encrypting the data file again by a second encryption means (col. 3, lines 7-30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the teaching of Oishi et al. in the combination of Haruki, Obata and Eller et al. in order to prevent illicit or unauthorized use and copying of the music (Oishi et al., col. 1, lines 14-27).

With respect to claim 6:

The teaching of Eller et al. further includes: rendering said decrypted music unutilizable after extracting said music playing data from said encrypted given music work resource (col. 6, lines 57-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate this teaching of Eller et al. into the apparatus and

Art Unit: 2837

method of Oishi et al. so that, after extracting said music playing data from said data file encrypted by the first encryption means, said decrypted music would be made unutilizable, in order to prevent illicit or unauthorized use and copying of the music (Eller et al., Oishi et al., col. 6, lines 57-60 and Oishi et al., col. 1, lines 14-27).

Election/Restrictions

4. Newly submitted claims 12-14 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

The proposed claims 12-14 requiring "said storing device is a memory card for storing said encrypted music playing data file, and said decrypted music playing data file is further encrypted by a further encrypting device and stored in a further storing device, and said encrypted music playing data file stored in said memory card is deleted as said further encrypted music playing data file is stored in said further storing device" raises new issues which would require further search and consideration.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 12-14 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in

Art Unit: 2837

this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Response to Arguments

6. Applicant's arguments received 12/04/2006 with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-11 are rejected as new prior art reference (U.S. Pat. No. 5147970 to Obata) has been found to teach the limitations argued by the Applicant. Detailed response is given in sections 2-3 as set forth above in this Office Action.

Contact Information

Art Unit: 2837

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jianchun Qin
Examiner
Art Unit 2837

JQ JQ

28
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